

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/653;688	09/02/2003	Steven P. Nolan	A02194US (98016.23)	3477	
22920	20 7590 11/22/2005		EXAMINER		
GARVEY SMITH NEHRBASS & NORTH, LLC LAKEWAY 3, SUITE 3290 3838 NORTH CAUSEWAY BLVD.			SHIAO, RE	SHIAO, REI TSANG	
			ART UNIT	PAPER NUMBER	
METAIRIE,	METAIRIE, LA 70002		1626		

DATE MAILED: 11/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
, , , , , , , , , , , , , , , , , , ,	10/653,688	NOLAN, STEVEN P.				
Office Action Summary	Examiner	Art Unit				
	Robert Shiao	1626				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a repl - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be time y within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1)⊠ Responsive to communication(s) filed on <u>responses_filed on 08/15, 2005</u> .						
3) Since this application is in condition for allowance except for formal matters, prosecution as to the ments is						
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4)⊠ Claim(s) <u>1-4 and 6-20</u> is/are pending in the application.						
4a) Of the above claim(s) 13 and 14 is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
<u> </u>	5)⊠ Claim(s) <u>1-4,6-12 and 15-20</u> is/are rejected.					
7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement.						
8) Claim(s) are subject to restriction and/o	or election requirement.					
Application Papers						
9) The specification is objected to by the Examiner.						
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
The dath of declaration is objected to by the Ex	kaminer. Note the attached Office	Action or form P1O-152.				
Priority under 35 U.S.C. § 119		,				
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Burea						
* See the attached detailed Office action for a list	of the certified copies not receive	d.				
Attachment(s)						
1) Notice of References Cited (PTO-892)	4) Interview Summary	(PTO-413)				
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 	Paper No(s)/Mail Da 5) Notice of Informal P	ate atent Application (PTO-152)				
Paper No(s)/Mail Date 6) Other:						

Application/Control Number: 10/653,688

Art Unit: 1626

DETAILED ACTION

Page 2

This application claims benefit of the provisional application:
 60/407,073 with a filing date 08/30/2002.

2. Amendment of claims 1-4, and 18-20, and cancellation of claims 5 and 21 in the amendment filed on August 15, 2005, is acknowledged. Claims 1-4, 6-20 are pending in the application.

Responses to Amendment/Arguments

- **3.** Rejection of claims 3-4 under 35 U.S.C. 112, second paragraph, has been overcome in the amendment filed on August 15, 2005.
- 4. Rejection of claims 1-4, 6-12, and 15-20 under 35 U.S.C. 102(b) or 103 (a) over Arduengo et al. publication, Tetrahedron, 1999, 55:14523-14534, has been overcome in the amendment filed on August 15, 2005. Rejection of claims 1-4, 6-12, and 15-20 under 35 U.S.C. 102(b) over Jafarpour et al. publication, J. of Organometallic Chemistry, 2000, 606:49-54, has been overcome in the amendment filed on August 15, 2005. Since claim 5 has been canceled, therefore, rejection of claim 5 under 35 U.S.C. 102(b) or 103(a), is obviated herein.
- 5. Applicant's arguments regarding rejection of claims 1-4, 6-12, and 15-20 under 35 U.S.C. 112 paragraph, i.e., without limitation of "synthesizing or providing diimine compound", have been fully considered but they are not persuasive. Applicants argue that one of ordinary skill in this art could prepare an imidazolium salt compounds using other diimine compounds and other specifics than those explicitly set out in the

specification. However, applicants do not provide specific or substantial written description in the specification for enablement of a process preparing the instant imidazolium salt compounds using starting material other diimine compounds, or a compound other than the compound of formula (1) or (3). Therefore, rejection of claims 1-4, 6-12, and 15-20 under 35 U.S.C. 112 paragraph, is maintained. Incorporation of limitation "diimine compound" (i.e., formula (1) or (3)) into the claims, would obviate the rejection. Since claim 5 has been canceled, therefore, rejection of claim 5 under 35 U.S.C. 112, first paragraph, is obviated herein.

6. Applicant's arguments regarding rejection of claims 1-4, 6-12, and 15-20 under 35 U.S.C. 103(a) over Jafarpour et al. publication, J. of Organometallic Chemistry, 2000, 606:49-54, have been fully considered but they are not persuasive. Applicants argue that the instant processes are operated under a ring closure conditions at or below room temperature, while Jafarpour et al. processes are operated at elevated temperatures (i.e., 70°C). However, the Courts have decided per In re Boesch, 205 USPQ 215 (1980), that the optimizatation of variables, such as pH, pressure, temperature, and molar ratios, in a known process is prima facie obvious. Therefore, the claimed process would have been suggested to one skilled in the art.

The motivation to make the claimed compounds derives from the expectation that the instant claimed processes would possess similar yields from the known Jafarpour et al. processes to that which is claimed in the reference. Therefore, rejection of claims 1-4, 6-12, and 15-20 under 35 U.S.C. 103(a) over Jafarpour et al. publication,

Art Unit: 1626

J. of Organometallic Chemistry, 2000, 606:49-54, is maintained.

Objection

- 7. Claim 1, line 1, recites the term "imidazolium salt" without formulae, is objected. Incorporation of the compounds of formula (2) or (4), would obviate the objection, see claims 19-20.
- 8. Claims 19-20, line 3, recite the term "the salt", are objected. Replace the term "the salt" with the term "imidazolium salt" would obviate the objection.
- 9. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 1626

Telephone Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Shiao whose telephone number is (571) 272-0707. The examiner can normally be reached on 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph K. McKane can be reached on (571) 272-0699. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

KAMAL A. SAEED. PH D

- a- 152

Joseph K. McKane

Supervisory Patent Examiner

Art Unit 1626

K. 5 -

Robert Shiao, Ph.D. Patent Examiner Art Unit 1626

October 05, 2005